

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

e Application of:

Philip Y.W. Tsui

Application No.: 10/051,331

Filed: January 15, 2002

For: TRANSMITTER FOR OPERATING

ROLLING CODE RECEIVERS

Examiner: Unknown

Art Group: 2185

RECEIVED.

OCT 0 9 2002

Technology Center 2100

INFORMATION DISCLOSURE STATEMENT

OCT 1 8 2002

Technology Center 2600

Commissioner for Patents Washington, D.C. 20231

Sir:

In accordance with Applicant's duty of disclosure under 37 C.F.R. § 1.56, and in accordance with 37 C.F.R. §§ 1.97-1.98, Applicants submit the enclosed Form PTO/SB/08A (Modified), along with copies of the documents listed therein.

It is hereby stated that this Information Disclosure Statement is being filed along with a Petition to Make Special but before the mailing of an Office Action. Applicant does not believe that a fee is required. However, if any fee is required, please charge Deposit Account No. 09-0946. An extra copy of the Fee Transmittal is enclosed for Deposit Account charging purposes.

Respectfully submitted,

IRELL AND MANELLA LLP

Dated: October 1, 2002

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CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner of Patents,

Washington, D.C. 20231 on: October 1, 2002

Darla Cleveland

Date: October 1, 2002

Form PTO/SB/08A (Modified)

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet of

| Comp | lete if known | | | |
|------------------------|-------------------|-------------|--|--|
| Application Number | 10/051,331 | | | |
| Filing Date | November 15, 1996 | | | |
| First Named Inventor | Philip Y.W. Tsui | DEAL | | |
| Group Art Unit | Unknown | RECEIVED | | |
| Examiner Name | Unknown | 007 0 0 000 | | |
| Attorney Docket Number | 155609-0041 | | | |

Technology Center 2100

| | | | U.S. I | PATENT DOCUMEN | TS | |
|----------|------|----------------------|--------------|-----------------------------|---------------------------------|---|
| Examiner | Cite | U.S. Patent Document | | Name of Patentee or | Date of Publication | Pages, Columns, |
| Initials | No. | Number | Kind Code | Applicant of Cited Document | of Cited Document MM-DD-YYYY | Lines, Where Relevant Passages or Relevant Figures Appear |
| 18/20 | 1. | 5,923,758 | | Khamharn et al. | 07-13-1999 | |
| ALANA . | 2. | 6,169,492 | | Dabbish | 01-02-2001 | RECEIVE |
| JAX. | 3. | 6,154,544 | | Farris et al. | 11-28-2000 | ILOLIAL |
| PLAN. | 4. | 6,025,785 | | Farris et al. | 02-15-2000 | OCT 1 8 2002 |
| MIN. | 5. | 5,969,637 | | Doppelt et al. | 10-19-1999 | 001 1 0 2002 |
| 1001 | 6. | 4,928,098 | | Dannhaeuser | 05-22-1990 | Cohnology Center D |
| 1011 | 7. | 5,089,692 | | Tonnesson | 02-18-1992 | echnology Center 2 |
| All | 8. | 5,600,324 | | Reed et al. | 02-04-1997 | |
| | 9. | 5,680,134 | | Tsui | 10-21-1997 | |
| 1211, | 10. | 5,841,390 | İ | Tsui | 11-24-1998 | |
| TOTAL | 11. | 6,005,508 | | Tsui | 12-21-1999 | |
| ALX | 12. | 6,441,719 | | Tsui | 08-27-2002 | |
| | 13. | 6,359,558 | | Tsui | 03-19-2002 | |
| 171 | 14. | 6,243,000 | | Tsui | 06-05-2001 | |
| | 15. | 6,249,673 | | Tsui | 06-19-2001 | |
| 2000 | 16. | 2001/0034213 | | Tsui | 10-25-2001 | |
| 77 | | | İ | | | |
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|--------------------------|------|-------------------------|-------------|--------------|--------------------------------|---------------------------------|---|--|--|--|
| Examiner Cite No. | Cite | Foreign Patent Document | | | Name of Patentee or | Date of Publication | Pages, Columns, | | | |
| | No. | Office | Number | Kind Code | Applicant of Cited Document | of Cited Document MM-DD-YYYY | Lines, Where Relevant Passages or Relevant Figures Appear | | | |
| Kg | 17. | | WO 99/41693 | | Tsui | 08-19-1999 | | | | |
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Examiner:

Date Considered: 26 October

Examiner: Intial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.



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DISCUSSION OF REFERENCES UNDER M.P.E.P. § 708.02, VIII

Commissioner for Patents Washington, DC 20231-9999

Sir:

In support of the enclosed Petition to Make Special, and as required under MPEP § 7098.02(VIII)(E), Applicant would like to discuss the references submitted herewith in order to show how the claimed subject matter is patentable over such.

U.S. Patent No. 5,923,758 issued to Khamharn et al. ("Khamharn") Α.

Khamharn discloses a method of automatically restoring synchronization between a rolling code transmitter and a rolling code receiver, without the use of EEPROM in the transmitter (See Khamharn, Col. 1, lines 62-67; Col. 2, lines 19-29). The resynchronization procedure of Khamharn proceeds by updating a sequence number value (SQN2) of a receiver based on the difference between SQN2 and a receiver sequence number value (SQN1) from a corresponding transmitter.

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In contrast, the present application is drawn to a method and system for operating a rolling code receiver using a fixed code transmitter. As recited in independent claims 1, 6, 11, 15, 18 and 20, a set of fixed codes stored in the fixed code transmitter is used to operate a corresponding rolling code receiver. Applicant submits that the invention of Khamharn is directed to a completely different problem and fails to even mention the use of fixed codes at all.

B. U.S. Patent No. 6,169,492 B1 issued to Dabbish ("Dabbish")

Dabbish describes another method for synchronizing a rolling code transmitter/receiver system. Dabbish claims that the method disclosed therein maintains the security level of the system, unlike other prior art resynchronization methods (See Dabbish, Col. 5, lines 14-20). Rather than just updating the rolling code sequence of a receiver to coincide with the code sequence of the transmitter, the resynchronization method of Dabbish uses a temporary challenge-count window to maintain the security of the system (See Dabbish, Col. 2, line 67 to Col. 3, line 48).

Applicant submits that there is no teaching or suggestion in Dabbish of operating a rolling code receiver using a set of fixed codes stored in the fixed code transmitter. As with the invention of Khamharn, Dabbish is directed at solving the synchronization problem in a rolling code transmitter/receiver system.

C. <u>U.S. Patent No. 6,154,544 issued to Farris et al.</u> ("Farris '544 Patent")

The Farris '544 Patent describes a rolling code transmitter/receiver system. In particular, the Farris '544 Patent describes how a rolling code transmitter generates a 32-bit fixed portion of the activation code to be transmitted and a 32-bit rolling code portion of the activation code (See Farris '544 Patent, Col. 3, lines 13-27). The fixed code portions and rolling code portions are converted to trinary bit codes and shuffled so that alternating trinary bits are comprised of fixed code bit and a rolling code bit to yield a 40 trinary bit code. The 40 trinary bit

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code is then transmitted to the rolling code receiver in two 20 trinary bit frames. Thereafter, "the two 16-bit fixed code words are used as a pointer to identify the location of a previously stored rolling code value within in the receiver." (See Farris '544 Patent, Col. 3, lines 53-55).

Applicant submits that the Farris '544 Patent fails to teach or suggest operating a rolling code receiver using a set of fixed codes stored in the fixed code transmitter. The Farris '544 Patent is clear in that the system is predicated on a rolling code format and that the received 32-bit rolling code is what is compared with the stored rolling code (See Farris '544 Patent, Col. 3, lines 61-63). Moreover, Applicant submits that, if anything, the Farris '544 Patent teaches away from operating a rolling code receiver using a set of fixed codes since there would be little need in such a case for the forward and backward windows and related code incrementation described at Col. 3, line 63 to Col. 4, line 27.

D. U.S. Patent No. 6,025,785 issued to Farris et al. ("Farris '785")

The Farris '785 Patent describes a receiver that is capable of receiving either fixed or rolling type access codes (See Farris '785 Patent, Abstract). The receiver includes a controller for identifying the type of access code received and for learning both fixed and rolling codes (See Farris '785 Patent, Abstract; Col. 2, lines 12-15).

While the Farris '785 Patent may describe a receiver that can be programmed to accept either rolling codes or fixed code, Applicant submits that the Farris '785 Patent fails to teach or suggest operating a rolling code receiver using a set of fixed codes stored in a fixed code transmitter. In particular, a fixed code transmitter will operate the receiver of the Farris '785 Patent as a fixed code receiver, while a rolling code transmitter would operate the receiver of the Farris '785 Patent as a rolling code receiver.

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E. U.S. Patent No. 5,969,637 issued to Doppelt et al. ("Doppelt")

The Doppelt disclosure is very similar to the Farris '785 disclosure (two of the three inventors are the same), except that the claims of Doppelt are directed at operating the light of a garage door opening system when the garage door is not in motion.

Applicant submits that Doppelt is directed to a completely different concern than the present application and has no bearing on the patentability of the present application.

F. U.S. Patent No. 4,928,098 issued to Dannhaeuser ("Dannhaeuser")

Dannhaeuser describes a rolling code receiver/transmitter system, whereby the receiver will be actuated by the transmitter even though the code generator in the transmitter may be out of sync with the code generator of the receiver (See Dannhaeuser, Col. 2, lines 14-27).

Applicant submits that Dannhaeuser teaches only operating a rolling code receiver with a rolling code transmitter, and does not teach or suggest operating a rolling code receiver using a set of fixed codes stored in the fixed code transmitter, as recited in the claims of the present application.

G. U.S. Patent No. 5,089,692 issued to Tonnesson ("Tonnesson")

Tonnesson describes a mechanical locking system based on a multi-level rolling code system, whereby a locking mechanism will be actuated only by a key card that provides the current code for a given level.

H. U.S. Patent No. 5,600,324 issued to Reed et al. ("Reed")

Reed discloses a rolling code keyless system, where the rolling code changes each time the receiver acknowledges receipt of a signal (See Reed, Col. 2, lines 10-14). The rolling

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code system includes other features, such as resynchronization in the event of power loss and accommodating multiple transmitters having different priority levels.

Applicant submits that Reed fails to teach or disclose operating a rolling code receiver using a set of fixed codes stored in the fixed code transmitter, as recited in the claims of the present application.

I. U.S. Patent No. 5,680,134 issued to Tsui ("Tsui '134 Patent")

The Tsui '134 Patent describes a programmable transmitter-receiver system, wherein "the data transmission format and the transmission frequency are selectable." (See Tsui '134 Patent, Abstract). The Tsui '134 Patent describes the selection of the data transmission format and the transmission frequency of either a receiver and/or transmitter to emulate other transmitter-receiver controller systems (See Tsui '134 Patent, Abstract; Col. 2, lines 3-11). However, there is no teaching or suggestion in the Tsui '134 Patent of operating a rolling code receiver using a set of fixed codes stored in the fixed code transmitter, as recited in the claims of the present application.

J. U.S. Patent No. 5,841,390 issued to Tsui ("Tsui '390 Patent")

The Tsui '390 Patent is a continuation-in-part of the Tsui '134 Patent. The Tsui '390 Patent describes the transmitter-receiver system of the Tsui '134 Patent, where the transmitter provides a signal to the receiver in at least two difference formats, so that manual selection of a specific transmission format is not required (See Tsui '390 Patent, Abstract). Again, there is no teaching or suggestion of operating a rolling code receiver using a set of fixed codes stored in the fixed code transmitter, as recited in the claims of the present application.

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K. U.S. Patent No. 6,005,508 issued to Tsui ("Tsui '508 Patent")

The Tsui '508 Patent is a continuation-in-part of the Tsui '134 Patent. The Tsui '508 describes the transmitter-receiver system of the Tsui '134 Patent, wherein a generated coded signal, which is provided to a receiver, includes an address in a selected data format, as recited in claim 1 of the Tsui '508 Patent. There is, however, no teaching or suggestion of operating a rolling code receiver using a set of fixed codes stored in the fixed code transmitter.

L. <u>U.S. Patent No. 6,243,000 B1 issued to Tsui ("Tsui '000 Patent") and PCT</u> Application No. WO 99/41693

The Tsui '000 Patent and its PCT counterpart application describe a transmitterreceiver system in which the receiver receives coded signals from at least two transmitters,
wherein each of the two coded signals includes a unique identification code and a rolling code
(See Tsui '000 Patent, Abstract). In addition, the first rolling code is described as varying
according to a first arithmetic equation, while the second rolling code is described as varying
according to a second arithmetic equation (See Tsui '000 Patent, Independent Claims 1, 8 and
13). There is, however, no teaching or suggestion of operating a rolling code receiver using a set
of fixed codes stored in the fixed code transmitter.

M. U.S. Patent No. 6,359,558 B1 issued to Tsui ("Tsui '558 Patent")

The Tsui '558 Patent is a continuation-in-part of the Tsui '000 Patent. The Tsui '558 Patent describes an alarm relay whereby a microphone produces a signal responsive to an audible alarm having a particular frequency. A detect signal is then produced where the signal is above a predetermined level. As with the aforementioned references, there is no teaching or suggestion of operating a rolling code receiver using a set of fixed codes stored in the fixed code transmitter.

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N. U.S. Patent No. 6,441,719 B1 issued to Tsui ("Tsui '719 Patent")

The Tsui '719 Patent is a continuation-in-part of Tsui '000 Patent. The Tsui '719 Patent describes a system in which a security device receives a signal from a transmitter. In response to the transmitter signals, the security device transmits a rolling code to a signaling device. The received rolling code is then compared to a stored rolling code and, if there is a match, an output signal is generated (See Tsui '719 Patent, Abstract; Col. 1, lines 50-63).

However, as with the references discussed above, there is no teaching or suggestion of operating a rolling code receiver using a set of fixed codes stored in the fixed code transmitter.

O. United States Patent No. 6,249,673 B2 issued to Tsui ("Tsui '673 Patent")

The Tsui '673 Patent describes a universal transmitter that can detect and emulate a transmission signal of a transmitter. The universal transmitter detects a frequency and modulation pattern of a transmitted signal and then transmits an output signal having the frequency and the modulation pattern of the transmission signal (See Tsui '673 Patent , Abstract; Col. 2, lines 10-23; Figures 6-7B). Again, Applicant submits that there is no teaching or suggestion of operating a rolling code receiver using a set of fixed codes stored in the fixed code transmitter.

Atty. Docket No. 155609-0041 Application No. 10/051,331 In view of the foregoing, Applicant contends that none of the cited references disclose or render obvious the claimed invention. Applicant respectfully requests examination of the pending case at the Examiner's earliest availability.

Respectfully submitted,

IRELL AND MANELLA LLP

Dated: October 1, 2002

Reg. No. 45,810

CERTIFICATE OF MAILING

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I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner of Patents and Trademarks, Washington, D.C. 20231

on: October 1, 2002

Darla Cleveland Date: October 1, 2002